

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-13 (canceled).

14. (new) An electric current detector comprising:
- a core formed of a magnetic material;
  - a reinforcement tube disposed in said core for defining an opening inside said reinforcement tube;
  - a Hall effect sensor disposed in said core out of said reinforcement tube;
  - a plurality of lead terminals electrically connected to said Hall effect sensor;
  - a plastic package for encapsulating said core, reinforcement tube, Hall effect sensor and each end of said lead terminals; and
  - a conductor loosely and irremovably disposed in the opening of said reinforcement with a gap for longitudinal movement of said conductor in a limited range;
  - said conductor being in spaced relation to said Hall effect sensor which detects electric current flowing through said conductor.
15. (new) The electric current detector of claim 14, wherein said conductor is formed with a pair of legs that extend to the outside of said opening,

each of said legs having a bent, curved or enlarged portion to prevent disengagement of said conductor from said opening.

16. (new) The electric current detector of claim 14, wherein said conductor is larger than said opening in length but smaller than said opening in thickness and width to cause said conductor to vertically, longitudinally and widthwise move in said opening.

17. (new) The electric current detector of claim 14, wherein said conductor comprises a pair of bases at the opposite ends to electrically connect said bases to printed circuits on substrate for detection of electric current through said conductor.

18. (new) The electric current detector of claim 14, wherein said reinforcement tube of rectangular section is disposed in a channel formed by said core,

said Hall effect sensor is positioned in said channel in front of said reinforcement tube.

19. (new) The electric current detector of claim 14, wherein said conductor may be arranged in said opening without contact to inner surfaces of said reinforcement tube.

20. (new) The electric current detector of claim 14, further comprising a support pad for mounting said Hall effect sensor on said support pad, wherein said support pad, Hall effect sensor (2) and lead terminals (3) form a leadframe assembly (23) for integral attachment in a cavity of a mold to form said package (4).

21. (new) The electric current detector of claim 14, wherein said conductor forms a magnetic field of magnetic flux and said core forms a magnetic circuit through which said magnetic flux passes across said Hall effect sensor.

22. (new) The electric current detector of claim 21, wherein said core comprises a pair of arm plates and a connector for connecting said arm plates to define a channel, said reinforcement tube is positioned in said channel to receive said conductor in said reinforcement tube.

23. (new) The electric current detector of claim 22, wherein each of said arm plates has an inward lug at the free end extending toward said Hall effect sensor.